

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 11-255748

(43)Date of publication of application : 21.09.1999

(51)Int.Cl.

C07D213/32

(21)Application number : 10-060794

(71)Applicant : MITSUBISHI CHEMICAL CORP

(22)Date of filing : 12.03.1998

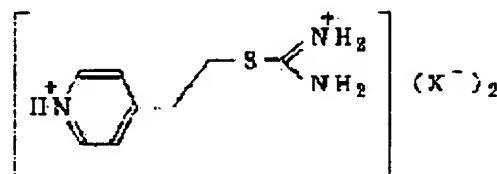
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## (54) PRODUCTION OF ISOTHIURONIUM SALT AND 2-(4-PYRIDYL) ETHANETHIOL

(57)Abstract:

**PROBLEM TO BE SOLVED:** To obtain at a low cost and in high yield the subject compound useful as an intermediate of pharmaceuticals, agrochemicals, compounds used as catalyst for the preparation of bisphenol A or the like by reaction between vinylpyridine, thiourea and an acid in propanol.

**SOLUTION:** This isothiuronium salt of the formula (X- is an anion corresponding to the acid to be used) is obtained by such a process as to charge one mol 4-vinylpyridine, preferably 0.8-1.2 mol thiourea and preferably 2.2-3.0 mol acid (preferably p-toluenesulfonic acid) into a reactor, add 2-propanol solvent thereto, preferably in an inert gas atmosphere such as nitrogen, heat the system preferably at 70-80°C to dissolve the thiourea or the like, then heat the system to 70-90°C, drop 4-vinylpyridine under agitation, carry out a reaction for 1-5 h under reflux, cool the reaction solution to precipitate a salt after terminating the reaction, followed by filtration and then washing the resultant salt with a dried ether or the like. The p-toluenesulfonic acid is preferably charged at 5-60 wt.% based on the 2-propanol.



## LEGAL STATUS

[Date of request for examination]

09.04.2003

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

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